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PATENT APPLICATION  
Mo-5494  
LeA 32,524

1714

#1714/Response  
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(A-E)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICATION OF )  
THOMAS ECKEL ET AL ) GROUP NO.: 1714  
SERIAL NUMBER: 09/485,288 ) EXAMINER: P. A. SZEKELY  
FILED: FEBRUARY 7, 2000 )  
TITLE: FLAME RESISTANT ABS POLY- )  
CARBONATE MOULDABLE )  
MATERIALS )

**RESPONSE**

Assistant Commissioner for Patents  
Washington, D.C. 20231  
Sir:

The Office Action dated December 23, 2002, issued in the subject patent application, has been received and reviewed and the following is in response thereto.

Claims 1-6, 8-10 and 14-18 are pending in the application.

The invention is directed to a thermoplastic molding composition, the essential components of which are poly(ester)carbonate, a graft polymer that contains a graft base the particle size ( $d_{50}$ ) of which is 0.20 to 0.35  $\mu\text{m}$ , a mixture of phosphorous compounds, and fluorinated polyolefin. The invention resides in the finding that the mechanical properties of the composition critically depend on, inter alia, the particle size of the graft base.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents Washington, D.C. 20231, on 3/24/2003  
Date

Aron Preis, Reg. No. 29,426

Name of applicant, assignee or  
Registered Representative

Signature

March 24, 2003

Date

Claims 1-6, 8-10, 14, 15 and 17-18 stand rejected under 35 U.S.C. 102(e) said to be anticipated by Eckel et al (U.S. Patent 5,672,645).

Eckel disclosed a thermoplastic molding compound that contains polycarbonate, vinyl copolymer, a graft polymer, a mixture of phosphorous compounds and a fluorinated polyolefin. Importantly, the average particle diameter ( $d_{50}$ ) of Eckel's graft copolymer is 0.05 to 2  $\mu\text{m}$  (col. 6, lines 19-20).

In rejecting the claims, the Examiner contends that "one common point in a range results in anticipation". This contention is not completely correct: only a prior subgenus anticipated the later claimed genus. See IN RE RICHARD G. SMITH (CCPA)173 U.S.P.Q.679. In the instant application, the claimed range 0.2 to 0.35 microns (200 to 350 nanometers) is a subgenus that is not described by the referenced genus of 0.05 to 2 microns (50 to 2000 nanometers) that embraces sizes ranging over three orders of magnitudes.

Reconsideration and retraction of the rejection under Section 102 are requested.

The claims stand rejected said to be unpatentable under 35 U.S.C. 103(a) over Eckel et al (U.S. Patent 5,672,645) in view of Serini et al (U.S. Patent 4,172,103) or Bodiger et al (U.S. Patent 5,849,827).

Eckel was discussed above and its shortcomings in the present context were noted.

Serini disclosed a molding compound that contains a polycarbonate at least some of which structural units contain alkyl substituents. The compounds disclosed might contain graft copolymers (rubbers) including such rubbers having particle sizes in the preferred range of 0.03 to 10 microns.

Bodiger disclosed a composition containing polycarbonate, an optional rubber containing graft copolymers and a flame retardant. Presently relevant is the particle size ( $d_{50}$ ) of the graft base that is in the range of 0.05 to 2  $\mu\text{m}$ .

Neither Serini nor Bodiger are seen as augmenting Eckel's disclosure in any presently relevant way.

It was earlier pointed out that even if the cited art were to amount to the prima facie case, the Eckel Declaration includes evidence to overcome the obviousness

rejection. The experimental results thus provided clearly point to the criticality of the particle size in the context of the invention. Attention is directed to the properties of the three compositions reported in the declaration. The compositions differed only in terms of the particle sizes of their included graft polymers. The results show that the composition in accordance with the invention – Example A; particle size 0.3 microns- features higher tensile modulus, higher tensile strength and greater resistance to stress cracking than do corresponding compositions where the particle sizes were outside the claimed range – Example B where the particle size was 0.4 microns and Example C wherein particle size was 0.19 microns. This dependence of the properties of the composition on the tested parameter has not hitherto been described or suggested by the cited references.

Applicants respectfully submit that the results rebut the allegation of obviousness and overcome the rejection. .

Believing the above represents a complete response to the Office Action and that the application is in condition for allowance, Applicants request the earliest issuance of an indication to this effect.

Respectfully submitted,

By



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